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Rhode Island Energy™
a PPL company

May 9, 2024

VIA ELECTRONIC MAIL

Luly E. Massaro, Commission Clerk
Rhode Island Public Utilities Commission
89 Jefferson Boulevard
Warwick, RI 02888

RE: Docket No. 23-38-EL – The Narragansett Electric Company d/b/a Rhode Island Energy's Petition for Acceleration of a System Modification Due to Distributed Generation Project – Weaver Hill Project
Joint Rebuttal Testimony

Dear Ms. Massaro:

On behalf of The Narragansett Electric Company d/b/a Rhode Island Energy (the "Company"), enclosed please find the Company's joint pre-filed rebuttal testimony of Eric Wiesner and Ryan Constable in the above-referenced docket.

Thank you for your attention to this filing. If you have any questions, please contact me at 401-784-4263.

Sincerely,

Andrew S. Marcaccio

Enclosure

cc: Docket No. 23-38-EL Service List

JOINT REBUTTAL TESTIMONY

OF

RYAN CONSTABLE

AND

ERIC WIESNER

Table of Contents

I. Introduction

Eric Wiesner

Q. Mr. Wiesner, please state your name and business address.

A. My name is Eric Wiesner. My business address is 280 Melrose Street, Providence, Rhode Island 02907.

Q. Mr. Wiesner, by whom are you employed and in what position?

A. I am employed by The Narragansett Electric Company d/b/a Rhode Island Energy (the "Company" or "Rhode Island Energy" or "RIE") as the Director of Asset Management and Engineering. In my position, I am responsible for planning and oversight of projects and programs that ensure a safe and reliable electric distribution system.

Q. Mr. Wiesner, please describe your educational background and professional experience.

A. I received a Bachelor of Science degree in Electric Engineering from Virginia Polytechnic Institute and State University (Virginia Tech) in Blacksburg, Virginia, in 2009 and a Master of Engineering in Electrical and Computer Engineering from Worcester Polytechnic Institute in Worcester, Massachusetts, in 2015. I am a Registered Professional Engineer in Rhode Island, number 14219. I worked at American Power Conversion from 2009 to 2010, after which time I joined the National Grid Service Company ("NGSC"). From 2010 to 2012, I worked in the Distribution Design department supporting distribution

line capital projects and programs. From 2012 to 2015, I worked in the Substation Engineering department supporting capital projects such as substation rebuilds, greenfield substations, and supporting responses to equipment failures. From 2015 to 2016, I joined General Dynamics Electric Boat as an Engineer supporting the electrical power system on various submarines. I returned to NGSC in 2016 and rejoined the Substation Engineering department performing the same type of work as I had performed from 2012 to 2015. From 2016 to 2020, I worked in the Substation Operations and Maintenance department as a field supervisor where I oversaw the day-to-day operations and maintenance of substations in Central Massachusetts. From 2020 to 2022, I rejoined the Substation Engineering department as the Manager where I oversaw the execution of substation capital projects and programs. In 2022, I joined Rhode Island Energy as the Regional Engineering Manager as described above and, on March 4, 2024, I became Director of Asset Management and Engineering.

Q. Have you previously testified before the Rhode Island Public Utilities Commission ("PUC")?

A. Yes. I have previously testified before the PUC in support of the Company's Fiscal Year ("FY") 2025 Electric Infrastructure Safety and Reliability ("ISR") Plan in Docket No. 23-48-EL.

Ryan Constable

Q. Mr. Constable, please state your name and business address.

A. My name is Ryan M. Constable. My business address is 280 Melrose Street, Providence, Rhode Island 02907.

Q. Mr. Constable, by whom are you employed and in what position?

A. I am employed by Rhode Island Energy as an Engineering Manager in the Distribution Planning and Asset Management Department. In my position, I am responsible for planning and oversight of projects and programs that ensure a safe and reliable electric distribution system.

Q. Mr. Constable, please describe your educational background and professional experience.

A. I received a Bachelor of Science degree in Electric Power Engineering from Rensselaer Polytechnic Institute in Troy, New York, in 1993 and a Certificate of Industrial Management and Power Engineering from Worcester Polytechnic Institute in Worcester, Massachusetts, in 2000. I am a Registered Professional Engineer in Massachusetts, number 41632. I worked at NGSC from 1994 to 2000 and again from 2010 to May 24, 2022, after which time I joined Rhode Island Energy in my current position.

I have held various positions of increasing responsibility in the area of Distribution Planning. From 1994 to 1998, I was a Project Engineer responsible for the design and maintenance of the electric infrastructure serving commercial and residential customers in southeastern Massachusetts. During the period from 1998 to 2000, I was a Planning Engineer conducting long-range electric system studies. From 2010 to 2011, I worked as a Principal Engineer in the Utility of the Future department developing the Worcester Smart Energy Solution Pilot. In 2011, I became the Manager of Distribution Planning and Asset Management – New England, directing a ten-person team to conduct annual planning activities, perform long-range planning studies, and develop regulatory filings. In 2017, I became the Acting Director of that department.

From 2000 to 2010, I worked for three independent transmission development companies, TransEnergie U.S., Cross Sound Cable Company, and Brookfield Renewable Power.

Q. Have you previously testified before the PUC?

A. Yes. I have previously testified before the PUC in support of the Company's FY 2025 Electric ISR Plan in Docket No. 23-48-EL; FY 2024 Electric ISR Plan in Docket No. 22-53-EL; FY 2023 Electric ISR Plan in Docket No. 5209; FY 2022 Electric ISR Plan in Docket No. 5098; and the Company's FY 2020 and FY 2023 Electric ISR Plan

Reconciliation Filings. I have also participated in technical sessions as part of Docket No. 23-34-EL (ISR Planning and Budget Processes).

II. Purpose and Structure of Joint Reply Testimony

Q. What is the purpose of this testimony?

A. The purpose of this testimony is for the Company to respond to the following filings that were submitted in this proceeding: (i) Pre-filed direct testimony of Gregory L. Booth, PE on behalf of the Division of Public Utilities and Carriers ("Division") submitted on April 17, 2024; and (ii) Pre-filed direct testimony of Mathew Ursillo on behalf of Green Development, LLC ("Green") submitted on April 17, 2024 (dated April 10, 2024); and (iii) Pre-filed direct testimony of Ryan Palumbo on behalf of Revity Energy LLC ("Revity") submitted on April 10, 2024.

Q. How is this testimony structured?

A. This testimony is broken up by topic. Specifically, through this testimony, the Company responds to the following topics:

- Tariff Application (Section III)
- Central Rhode Island West Area Study (Section IV)
- ISR Materials (Section V)
- Conclusion (Section VI)

III. Tariff Application

Q. Why should the PUC reject Mr. Booth's narrow interpretation of Section 5.4 of RIPUC No. 2258 entitled The Narragansett Electric Company Standards for Connecting Distributed Generation ("Interconnection Tariff" or "Tariff")?

A. As explained in this rebuttal testimony, the intent of the Interconnection Tariff is to align with the scope and duration of the Company's distribution work plan and, from a practical standpoint, it would be challenging to identify a significant distributed generation ("DG") project that could be fully installed within five years from the start of an Impact Study.

Q. What is the rationale behind the five-year look forward period referenced in Section 5.4 of the Interconnection Tariff?

A. The applicable statute, R.I. Gen. Laws § 39-26.3-4.1 (the "Interconnecting Statute"), is silent as to the timeframe over which a System Modification[1] might be considered accelerated. The rationale behind the five-year look forward period in the Interconnection Tariff is to set a timeframe that aligns with the scope and duration of the Company's distribution work plan, which at the time the acceleration provisions were incorporated into the Tariff, was five years. The Company notes that it now provides a 10-Year Long Range Plan.

[1] The Interconnecting Statute references a System Modification "benefiting other customers." A System Modification that "benefits other customers" can be considered a System Improvement as defined by the Tariff.

Q. What is the Company's basis for the rationale described above?

A. In Docket No. 4763, the Company responded to a record request issued by the PUC stating that the look forward period is five years from the date the impact study begins "to align with the Company's distribution work plan."[2] Emphasis added.

Q. Does the Company consider the Accelerated Modification[3] that is the subject of the Petition[4] to be aligned with the Company's distribution work plan? If so, please explain why.

A. Yes. The Company views the installation of approximately 17,000 feet of a manhole and duct bank system along Division Street and Nooseneck Hill Road, West Greenwich, and the installation of approximately 17,000 feet of three conductor 1000 kcmil EPR insulated Cu cable to extend the 3310 line, and the installation of just under one mile of a manhole and duct bank system and three conductor 500 kcmil EPR insulated CU cable to extend the 3310 line along Weaver Hill Road (the "Weaver Hill Work") as an Accelerated Modification that was anticipated and continues to be needed within the FY 2024 through FY 2028 period as identified in the Central Rhode Island West Area Study

[2] See the Company's response to Record Request No. 5 in Docket No. 4763. https://ripuc.ri.gov/sites/g/files/xkgbur841/files/eventsactions/docket/4763-NGrid-RR%282-23-18%29.pdf

[3] The Company will consider a System Modification to be an "Accelerated Modification" if such modification is otherwise identified in the Company's work plan as a necessary capital investment to be installed within a five -year period as of the date the Company begins the impact study of the proposed distributed generation project.

[4] The Company's Petition for Acceleration of a System Modification Due to Distributed Generation Project – Weaver Hill Projects dated October 17, 2023.

(the "Area Study" or "Central RI West Area Study"). The Central RI West Area Study was completed in September 2022. The Area Study's identified spend for the Weaver Hill Work is over the timeframe of FY 2024 though FY 2028. The Company began the Impact Studies associated with the Weaver Hill Work in April 2019 (FY 2020); August 2019 (FY 2020); and January 2020 (FY 2020); and identified spend stemming from the Central RI West Area Study four years later, in FY 2024.

Q. Mr. Booth's opinion is that the Accelerated Modification does not need to be included in an ISR Plan for nearly 15 years. Hypothetically, if an investment was 15 years out from being needed within an ISR Plan, would the Company consider it an Accelerated Modification?

A. As an initial matter, the Company does not agree with the Division's opinion regarding the need for the infrastructure that is being accelerated. The Weaver Hill Work was anticipated and continues to be needed within the FY 2024 though FY 2028 period as explained later in this testimony. However, if an investment is not needed for 15 years, the Company agrees that the project would be outside of the Company's five-year plan, which is the basis for the acceleration provisions in the Interconnection Tariff, and would not be considered by the Company for reimbursement as an Accelerated Modification.

Q. What insights or observations has the Company obtained from its ongoing review of DG interconnections and associated study timelines?

A. Since the Interconnection Tariff was amended to effectuate the statutory acceleration provisions, the scope, scale, and timelines for interconnections have become more complex both at state and federal levels. Accordingly, the Company looks at the surrounding circumstances of each project and the intent of the Interconnection Tariff and Interconnection Statute to determine whether to petition the PUC for reimbursement to the DG developer of an Accelerated Modification.

The interconnection study process for sites similar to Weaver Hill's site considered in this Petition can span many years. (In this case, the three sites took 3 to 5 years with one site's ISA still pending.). ISO-NE's Affected System Operator ("ASO") process can create similar timelines. Furthermore, the planning and full construction of projects identified within area studies can span many years considering the study time, the process time to introduce and request approval with an ISR Plan, and the practical design, procurement, and resourcing times.

As a result of timelines not contemplated during the development of the Interconnection Tariff, the Company notes a substantial conflict with a narrow interpretation of the Tariff and the intent of the Interconnection Statute. A narrow interpretation of the Tariff may result in limited to no opportunity for shared cost under the statutory acceleration

provisions, which is inefficient for distribution planning and infrastructure construction that may be beneficial to both distribution customers and interconnecting customers.

The Company offers these specific observations for (i) Green's 20,000 kW photovoltaic systems located at 899 Nooseneck Hill Road, West Greenwich, RI 02817 ("Nooseneck Project"); (ii) Revity's 40.7 MW photovoltaic systems located at 18 Weaver Hill Road, West Greenwich, RI 02817 ("Robin Hollow Project"); and (iii) Revity's 9.2 MW Studley Solar Project located at 189 Weaver Hill Road, West Greenwich, RI 02817 ("Studley Solar Project").[5] The Nooseneck, Robin Hollow, and Studley Solar Projects are collected referred to as the "Weaver Hill Projects":

1. The Central RI West Area Study was started during the Impact Study process, approximately one year after start, and prior to the first Interconnection Services Agreement ("ISA") execution.
2. The Central RI West Area Study substantially finished after the Nooseneck Project but prior to the execution of the first version of the ISAs for the Robin Hollow and Studley Solar Projects. The ISA for the Studley Solar Project has not yet been executed.
3. The Central RI West Area Study identified a number of system issues with variable timing from immediate to forecasted.

[5] See correspondence from the Company dated April 26, 2024 which memorializes an update in ownership and control of the Studley Solar Project from Energy Development Partners ("EDP") to Revity.

4. Regardless of system issue timelines, the Study recommendation must consider regulatory and practical project execution timelines.
5. Considering regulatory and practical project execution timelines, the Study recommendation would have started near DG interconnection finish and the Study recommendation would have finished within five years of the DG interconnection finish.
6. The system and customers will benefit from electrical facilities installed by the Weaver Hill Projects well within five years from interconnection.

IV. Central Rhode Island West Area Study

Q. What is the purpose of an area study?

A. Area studies are detailed and comprehensive reviews of various regions throughout the Company's' service territory. Significant work goes into developing each area study. The studies typically address issues in a 10- to 15-year window and typically start five to seven years after the last study was completed. The studies may be prompted by findings exceeding the Company's planning criteria, asset condition issues, large new customer load requests, or acute reliability issues. To date, the Company has completed all 11 Rhode Island area studies and reviewed results with the Division.

Q. Is the process Mr. Booth described in his testimony to essentially invalidate the Central RI West Area Study concerning?

A. Yes. There are a number of misinterpretations and contradictions that are concerning. The Central RI West Area Study was a comprehensive and detailed study that took approximately 14 months to complete and was completed by engineering in consultation with operations personnel. Mr. Booth indicated that "the load has been declining since the time the Area Study was performed, eliminating any near-term need for the Weaver Hill project" In doing so, he incorrectly interpreted the forecast and dismissed other important factors as explained in the testimony below.

Q. Were the Central RI West Area Study recommendations reviewed by the Division?

A. Yes. The Division's claim that the Central RI West recommendations are suddenly unnecessary is contrary to other communications with and statements by the Division. The Division reviewed the Central RI West Area Study issues and recommendations in May of 2021 and made no comments regarding the analysis. Despite this fact and RI Energy's response to DIV 4-3 explaining study versions, Mr. Booth states: "However, the FY 2023 ISR Plan was filed December 20, 2021 during the finalization of the Central RI West Area Study which is dated September 2022. It would have been speculative to include the Weaver Hill project in the FY 2023 ISR Plan." It was not speculative and appropriate to include the work as it had been reviewed by the Division. The Division also supported the inclusion of the Weaver Hill projects in the FY 2024 and FY 2025 ISR

Plan filings. In addition to the analysis mistakes detailed below, the Division has had 4 opportunities over 3 years to comment on the details of the Central RI West Study and has failed to do so.

Q. From a needs standpoint, is the Central RI West Area Study premised on the fact that the Weaver Hill Projects would be interconnected?

A. Mr. Booth indicated that the "The FY 2024 ISR Plan, filed in 2022, included the first engineering work for the Weaver Hill project and by that time all the impact and interconnection studies had been finalized. What this means is the DG was already the precipitating reason for the Weaver Hill project." This statement is completely incorrect as the Central RI West Study recommendation does not serve the DG and so it is impossible for the DG to be the precipitating reason for the new station and feeder. This explanation is in the Company's response to Division 2-4.

Q. Did the Weaver Hill Projects create the need identified in the Central RI West Area Study?

A. No. The needs for the new station and feeder are identified in the Central RI West Area Study.

Q. Why should Mr. Booth's reanalysis of the Central RI West Area Study and opinion that the Weaver Hill Work would not go into an ISR Plan for 15 years be dismissed?

A. Mr. Booth bases his opinion on 'nearly flat growth' since the study was conducted. The Division requested a number of CYME models with attempts to find a lower load level without considering the full load picture. For instance, the 2023 load levels were low. However, the peak was in September and should be used with caution. A similar case occurred during the 2014 and 2015 summer peaks, which were also low and the Company did not adjust the work plan. This was proven appropriate as the 2016 summer was a hot summer with a high peak load. This event occurred during Mr. Booth's time reviewing the yearly ISR Plans and the Division and Mr. Booth raised no comments and were seemingly unaware. The Company is not claiming the Division or Mr. Booth should be involved in the nuances of forecasting, but this is an example that demonstrates how they are typically unaware of these details. His opinion on deferral for 15 years should also be dismissed because he dismisses the reliability issues associated with some of the longest feeders in RI Energy's territory and is not factoring emerging contingency issues on the 54F1 circuit as noted in the Company's response to Division 5-2.

Q. Could you summarize the needs contained within the Central RI West Area Study?

A. The Central RI West Area Study was provided in this docket as Exhibit EJRS-7 attached to the Pre-Filed Joint Testimony of Erica Russell Salk & Stephanie A. Briggs. Sections 4.2.1 Normal Configuration – Thermal Loading, 4.3 Voltage Performance, and 4.4.1 Reliability Performance describe the needs identified within the study. A summary is presented below.

- **Normal Configuration – Thermal Loading:**
  - 63F6 is predicted to be overloaded 102% to 104%.
  - 54F1 is predicted to be loaded between 93% to 94%.

- **Voltage Performance:**
  - 54F1 and 63F6 have low voltage issues.

- **Reliability Performance:**
  - 63F6 and 54F1 with high 5-year average frequency and duration statistics

Q. Based on the needs summarized above, did the Company take a comprehensive approach when planning for a solution?

A. Yes, and that comprehensive solution was developed through a process that included collaboration with the Division. Of all the presentations and filings made regarding the recommended Central RI West solution as of the date the Petition was filed, the Company had not received any negative comments regarding the thoroughness of the analysis or the reasonableness of the solution.

Q. What are the overload conditions for the Hopkins Hill feeder 63F6? Please explain.

A. 2.3 miles of spacer cable is predicted to be overloaded on the 63F6 per the Company's response to Division 2-3. Mr. Booth states that "The Company discusses the Hopkins Hill feeder loading at 104 percent but it is only 88 percent today". However, Mr. Booth attributes this to reduced load growth and changing forecasts and is not factoring actual events and operating issues. First, the main reason the 63F6 has a lower load level is that the Company switched load away from the 63F6 to another area feeder in a temporary fashion to mitigate the possible overload. The feeders in this area have various unique issues resulting in unsustainable switching configurations. Secondly, because the area circuits are electrically strained, the Company is considering shifting new load that is required by a public entity in this area to the sub-transmission system. This would require additional investment for effective grounding and voltage regulation. As the system operator, the Company has visibility and understands the actual planning and operational needs of the RI electric system. While the Company attempts to keep the Division updated on system operations, it is difficult to fully relay and understand the issues through data requests.

Q. If not for the Central RI West Study projects, how would the Company address that exposure?

A. Due to the vegetation in this area, there is no ability to install a larger conductor. The length and voltage issues on the circuits in this area preclude feeder reconfiguration.

Although not considered in the study because it would not address all issues, a possible alternative to the loading concerns would be to underground the 2.3 miles at a cost of $10-$15 million. This concept would not address the voltage and reliability issues.

Q. By approving this Petition, will the Division and PUC be locked into all Area Study solutions?

A. No. Area Study solutions may evolve over time as more information becomes available. While the Company recognizes that investments will be examined through the ISR proceedings and petitions such as this one, it is important to acknowledge that the area study and long-range plan process has been vetted and is a good process for identifying ISR projects and the potential of overlap between system needs and DG interconnection efforts. In this case, the Company believes the needs and solution identified through the Central RI West Area Study remain valid.[6]

[6] In this case, the Company believes the needs and solution identified through the Central RI West Area Study remain valid today. However, even if circumstances changed since the Central RI West Area Study, the Company stated, at the time the Interconnection Tariff was amended to include the acceleration provisions, "that in order to provide certainty to developers, the Company would honor any accelerated modification set forth in an interconnection service agreement even if the ultimate 'need' proves to be later than previously forecasted in the five-year capital plan." See PUC Report and Order No. 23379 in Docket No. 4763 at Page 7.

V. ISR Materials

Q. When did the Weaver Hill Work first show up in an ISR, including 5-year plan within the ISR?

A. The Company first introduced the Weaver Hill project in the five year plan within the FY 2023 ISR Plan. The Company first included spend on the Weaver Hill project in the FY 2024 ISR Plan Filing. The Company notes that the scope has evolved since this ISR Plan, as explained in the Company's response to DIV 4-9.

VI. Conclusion

Q. Is PUC approval of the Petition consistent with the Interconnection Statute?

A. Yes.

Q. Does this conclude this testimony?

A. Yes, it does.

Certificate of Service

I hereby certify that a copy of the cover letter and any materials accompanying this certificate was electronically transmitted to the individuals listed below.

The paper copies of this filing are being hand delivered to the Rhode Island Public Utilities Commission and to the Rhode Island Division of Public Utilities and Carriers.

Andrew S. Marcaccio, Esq.

May 9, 2024
Date

Docket No. 23-38-EL Rhode Island Energy – Petition for Acceleration Due to DG Project – Weaver Hill Projects
Service List updated 2/7/2024

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